

DERWENT-ACC-NO: 1986-015183

DERWENT-WEEK: 198603

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TITLE: Tone signal generator -  
carries out tone colour change  
using relatively small  
waveshape memory and adds weighted  
tone signals to provide mixed  
signals

INVENTOR: SUZUKI, H

PRIORITY-DATA: 1984JP-0231294 (November 5, 1984) ,  
1984JP-0119084 (June 12,  
1984)

PATENT-FAMILY:

PUB-NO	PAGES	PUB-DATE
LANGUAGE		MAIN-IPC
EP 167847 A		January 15, 1986
E	046	N/A
DE 3569164 G		May 3, 1989
N/A	000	N/A
EP 167847 B		March 29, 1989
E	000	N/A
JP 61110199 A		May 28, 1986
N/A	000	N/A
US 4939973 A		July 10, 1990
N/A	000	N/A

INT-CL (IPC): G10H001/14, G10H007/00 ,  
H03M007/50

ABSTRACTED-PUB-NO: EP 167847A

BASIC-ABSTRACT:

The generator has a circuit designating a tone pitch of a tone to be generated.  
A waveshape memory (100) stores data representing a waveshape of a first tone colour and of periods out of a waveshape from the start of the sounding of the tone to its end. The waveshape data is read out at a speed determined in accordance with the tone pitch designated. A circuit changes the read out waveshape data to form waveshape data of a second, different, colour tone.

A circuit provides tone colour adjusting signals. A combiner joins the read out waveshape data and the changed waveshape data to provide combined data as a tone signal. The ratio of the two waveshape data is controlled in response to the tone colour adjusting signals.

USE/ADVANTAGE - For musical instrument. Tone colour change is carried out with ~~simple construction using memory of relatively~~ small capacity.

ABSTRACTED-PUB-NO: EP 167847B

EQUIVALENT-ABSTRACTS:

The generator has a circuit designating a tone pitch of a tone to be generated.  
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USE/ADVANTAGE - For musical instrument. Tone colour change is carried out with simple construction using memory of relatively small capacity.

US 4939973A

The device stores a full waveshape of a tone from the start to the end of sounding of the tone or a portion thereof in plural periods. A tone wave signal produced by reading this waveshape memory is applied to a colour circuit where its tone colour is changed. The tone wave signal whose tone colour has been changed and the tone wave signal whose tone colour has not been changed are both multiplied with respective coefficients whereby these tone wave signals are weighted.

The weighted tone wave signals are added together to provide a mixed tone signal. By controlling the coefficients, the tone colour imparted on the mixed signal is variously determined. The coefficients for the tone colour control

are provided in accordance with key scaling, key touch or operation states of control knobs. Thus tone signals, exhibiting a variety of tone colour changes are obtained using not so many wave memories.

ADVANTAGE - Improved quality. (15pp)

----- KWIC -----

Basic Abstract Text - ABTX (1):

The generator has a circuit designating a tone pitch of a tone to be generated. A waveshape memory (100) stores data representing a waveshape of a first tone colour and of periods out of a waveshape from the start of the sounding of the tone to its end. The waveshape data is read out at a speed determined in accordance with the tone pitch designated. A circuit changes the read out waveshape data to form waveshape data of a second, different, colour tone.

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